CLAIMS

1. Use of a compound according to Formula I in the manufacture of a medicament for the treatment of a disease caused by a disturbance in the activity of the androgen receptor, wherein Formula I is defined as:

$$R_{6} \xrightarrow{\overset{R_{7}}{Z}} X^{R_{3}} \xrightarrow{R_{4}} Y$$

Formula I

in which;

 R_1 and R_2 are the same or different and independently selected from the group consisting of; hydrogen, halogen, C_1 - C_{10} alkyl, C_1 - C_{10} substituted alkyl, C_2 - C_{10} alkenyl, C_2 - C_{10} alkynyl, C_1 - C_{10} alkynyl, C_1 - C_{10} alkynyl, C_1 - C_{10} alkynylthio, C_1 - C_{10} alkynylthio, C_1 - C_{10} alkylsulphone, C_1 - C_{10} alkynylsulphone, C_1 - C_{10} alkylsulphone, C_1 - C_{10} alkynylsulphone, C_1 - C_{10} alkylsulphoxide, C_1 - C_{10} alkynylsulphoxide, C_1 - C_{10} alkylsulphoxide, C_1 - C_{10} alkylarylsulphoxide, C_1 - C_1 0 aryl, or C_2 0 heteroaryl, optionally substituted with 0, 1, 2 or 3 groups of R^4 which groups may be the same or different; or R_1 and R_2 may together form a C_3 - C_1 0 cycloalkyl group;

R₃ and R₄ are the same or different and independently selected from hydrogen, halogen, C₁-C₂₀ alkyl, C₃-C₇ cycloalkyl, C₂-C₄ alkenyl, C₂-C₄ alkynyl, C₁-C₄ alkoxy, C₁-C₄ alkenoxy, C₁-C₄ alkynoxy, C₁-C₄ alkylthio, C₁-C₄ alkynylthio, C₁-C₄ alkynylthio C₁-C₁₀ alkylsulphone, C₁-C₁₀ alkenylsulphone, C₁-C₁₀ alkynylsulphone, C₆. C₁₀ arylsulphone, C₁-C₁₀ alkylsulphoxide, C₁-C₁₀ alkylsulphoxide, C₁-C₁₀ alkylarylthio, C₁-C₁₀ alkylarylsulphone, C₁-C₁₀ alkylarylsulphoxide, C₁-C₁₀ alkylarylsulphoxide, C₁-C₁₀ alkylarylsulphoxide, C₁-C₁₀ alkylarylsulphoxide, C₁-C₁₀ alkylarylsulphoxide, C₂-C₁₅ aryl, C₂-C₂₀ heteroaryl optionally substituted with 0, 1, 2 or 3 groups of R^a which groups may be the same or different; or can together form a keto group;

R₃ is chosen from the group consisting of; nitro, cyano, -CH₂CN, -COMe, acetic acid, halogen, sulphonic acid, -SO₂CH₃, aldehyde, carboxylic acid or ester, phosphonic acid or ester;

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R₆ is chosen from the group consisting of, hydrogen, C₁-C₅ alkyl, halogen, CN, CO₂H, CH₂F, or CF₃;

R₇ is chosen from the group consisting of; H, halogen or C₁-C₅ alkyl;

 R_8 is chosen from the group consisting of, hydrogen, C_1 - C_5 alkyl, halogen, CHF₂, CH₂F or CF₃;

X is chosen from the group consisting of; -NH-, -O-, -S-, -SO-, -SO₂, -Se-, -Te- or -S-S-

Y is chosen from the group consisting of; hydrogen, hydroxy, -CH2OH, methoxy, NH_2 , unbranched, branched or cyclic C_1 - C_5 alkyl, unbranched, branched or cyclic -NH(C_1 - C_3); unbranched, branched or cyclic $N(C_1$ - C_3), -NH(C_6 aryl), -N(C_6 aryl), -NH(C_1 - C_{10} heteroaryl), and -N(C_5 - C_{10} heteroaryl), end -N(C_5 - C_{10} heteroaryl), are optionally substituted with up to 3 groups of R^a which groups may be the same or different;

Z is chosen from the group consisting of; C, N, or O;

R^a represents a member selected from: hydrogen, halogen, -CN, OH, CO₂H, CHO, NO₂, -NH₂, -NH(C₁.C₄); N(C₁.C₄)₂, -NH(C₆ aryl), -N(C₆ aryl)₂, -NH(C₅.C₁₀ heteroaryl), and -N(C₅.C₁₀ heteroaryl)₂; or a pharmaceutically acceptable salt thereof.

- 2. Use according to claim 1, wherein R_1 or/and R_2 are H, (S)-methyl, methyl, (R)-ethyl, (S)-ethyl, ethyl, (R)-propyl, (S)-propyl, (S)-butyl, (S)-1-methyl-propyl, (S)-isopropyl, (S)-isopropyl, isopropyl, cyclopentyl, -(CH₂)₂SMe, (R)-CH₂SCH₂Ph, (S)-benzyl, 4-chloro-benzyl, (S)-3-methyl-1-H-indole or (S)-phenyl;
- 3. Use according to either of the preceding claims wherein R₃ is chosen from the group consisting of; hydrogen, methyl, ethyl, phenyl, 3-hydroxy phenyl, 4-hydroxy phenyl, or forms a keto group together with R₄.
- 4. Use according to any of the preceding claims wherein R_4 is H, methyl, or forms a keto group together with R_3 .
- 5. Use according to any of the preceding claims wherein R₅ is NO₂, CN, CH₂CN or CO₂H;
- Use according to any of the preceding claims wherein R₆ is Me, or CF₃;
- 7. Use according to any of the preceding claims wherein R₂ is H or Me:
- Use according to any of the preceding claims wherein R₈ is H or methyl;
- 9. Use according to any of the preceding claims wherein X is NH;
- 10. Use according to any of the preceding claims wherein Y is H, -OH, -OMe, -N (CH₂CH₃)₂, piperidine, or 4-mine-2-ylamine;
- 11. Use according to any of the preceding claims wherein Z is CR2 or N;
- 12. Use according to any of the preceding claims wherein the compound is chosen from the group consisting of;
- 2-Methyl-2-(4-mitro-3-trifluoromethyl-phenylamino)-propan-1-ol; [1-(4-Nitro-3-trifluoromethyl-phenylamino)-cyclopentyl]-methanol; (S)-2-(4-Nitro-3-trifluoromethyl-phenylamino)-3-phenyl-propan-1-ol;

- (S)-2-(4-Nitro-3-trifluoromethyl-phenylamino)-butan-1-ol;
- 2-Methyl-2-(3-hydroxy-4-nitro-phenylamino)-propan-1-ol;
- [1-(3-Methyl-4-nitro-phenylamino)-cyclopentyl]-methanol;
- (S)-2-(3-Methyl-4-nitro-phenylamino)-butan-1-ol;
- 2-Methyl-2-(6-methyl-5-nitro-pyridine-2-ylamino)-propan-l-ol;
- [1-(6-Methyl-5-nitro-pyridine-2-ylamino)-cyclopentyl]-methanol;
- (S)-2-(6-Methyl-5-nitro-pyridin-2ylamino) 2-phenyl-ethanol;
- (S) -2-(6-Methyl-5-nitro-pyridine-2-ylamino)-3-phenyl-propan-1-ol;
- (S)-2-(6-Methyl-5-nitro-pyridin-2-ylamino)-butan-1-ol;
- (DL) -3-(4-Chloro-phenyl)-2-(6-methyl-5-nitro-pyridin-2-ylamino)- -propan-1-ol;
- (S)-2-(6-Methyl-5-nitro-2-pyridin-2-ylamino)-propionic acid;
- (S)-2-(6-Methyl-5-nitro-pyridin-2-ylamino)-propan-1-ol;
- 2-(2,3-Dimethyl-4-nitro-phenylamino)-2-mehtyl-propan-1-ol;
- (S)-2-(3,5-Dimethyl-4-nitro-phenylamino)-butan-1-ol;
- 4-(2-Hydroxy-1,1-dimethyl-ethylamino)-2-trifluoromethyl-benzonitrile;
- 4-(1-Hydroxymethyl-cyclopentylamino)-2-trifluoromethyl-benzonitrile;
- (S)-4-(1-Hydroxymethyl-cyclopentylamino)-2-trifluoromethyl-benzonitrile;
- (R)-4-(1-Hydroxymethyl-butylamino)-2-trifluoromethyl-benzonitrile;
- (S)-4-(1-Hydroxymethyl-butylamino)-2-trifluoromethyl-benzonitrile;
- [4-((S)-1-Hydroxymethyl-butylamino)-2-trifluoromethyl-phenyl]-acetonitrile;
- [4-((R)-1-Hydroxymethyl-butylamino)-2-trifluoromethyl-phenyl]-acetonitrile;
- [4-((S)-1-Hydroxymethyl-3-methyl-butylamino)-2-trifluoromethyl-phenyl]-acetonitrile;
- 4-(2-Hydroxy-1,1-dimethyl-ethylamino)-2-methyl-benzonitrile;
- 6-(2-Hydroxy-1,1-dimethyl-ethylamino)-2-methyl-nicotinonitrile;
- $\hbox{$4$-(2-Hydroxy-1,1-dimethyl-ethylamino)-2,3-dimethyl-benzonitrile;}$

and compounds having the formula:

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$$R_6$$
 Z R_9 Q_2N

in which $R_{\!9},\,R_{\!6}$ and Z are as defined in the following table:

R9	R6	Z
Х ^н , ∕он	CF ₃	СН
HN X	CF ₃	СН
K _N → OH	CF ₃	СН
HO KNH	CF ₃	СН
HO	CF ₃	СН
но	CF₃	СН
HN	CF₃	СН
HO OH	CF ₃	СН
	L	

R9	R6	Z	T	1
₹ ^N OH	CF ₃	СН		
HO T	CF ₃	СН		
S → OH → OH	CF ₃	СН		
У NН ОН	CF ₃	СН		
S NH OH	CF ₃	СН		
→ NH OH	CF ₃	СН		
HO	CF ₃	СН	-	
HO HO H	CF ₃	СН		
N THE STATE OF THE	CF₃	СН		

R9	R6	Z
λ ^H	CF3	СН
¥ ^{NH}	CF ₃	СН
~~ _N ×	CF ₃	сн
₹ ^{NH}	CF ₃	СН
O NH NH	CF ₃	СН
H0 N X	CF ₃	СН
J [™] _H OH	СН3	N
но	СН3	N
X, N → OH	СН3	N

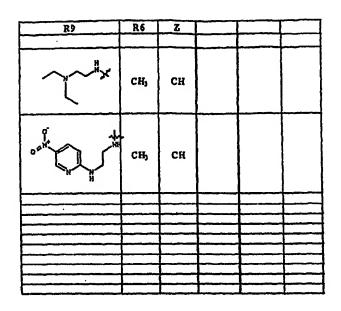
R9	R6	Z
но	СЊ	N
HO Y	СЊ	N
HO	СЊ	N
HN HO	СЊ	N
X ^N → OH	СЊ	N
→ NH OH	СН₃	. N
но	СЊ₃	N
or Jane	СЊ	N
ъ стория	СЊ	N

R9	726	7
R9	R6	Z
NH OH	СН3	N
S NH OH	СН₃	N
VNH XNH	СН₃	N
OH H	СН₃	N
но	СН₃	N
**~~ <i>o</i> ~	СН₃	N
X _{NH}	СЊ	N
X _{NH}	СН₃	N
HO NA	СН₃	N
H N ^N ↑↑ OH	CH ₃	СН

. R9	R6	Z	
но Д	СН₃	СН	
λ _N OH	СН₃	СН	
но	СН₃	СН	
HO YNH	СН₃	СН	
HO	СН₃	СН	
HN HO	СН₃	СН	
→ NH OH	СН3	СН	
S OH	СН₃	СН	
NH OH	СН₃	СН	
V,NH → OH	СН₃	CH	
ж ^{ин} Х	СН₃	СН	

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4-(2-Hydroxy-1,1-dimethyl-ethylamino)-2-methyl-benzoic acid;

(6-Methyl-5-nitro-2-pyridin-2-ylamino)-butionic methyl ester,

2-Methyl-N-(6-methyl-5-mitro-pyridin-2-yl amino)-propan-2-ol;

4-((R)-2-Hydroxy-1-methyl-ethylamino)-2-trifluoromethyl-benzonitrile

4-(R)-1-Furan-2-ylmethyl-2-hydroxy-ethylamino)-2-trifluoromethyl-benzonitrile

(R)-3-Furan-2-yl-2-(6-methyl-5-nitro-pyridin-2-ylamino)-propan-1-ol

2-(6-Methyl-5-nitro-pyridin-2-ylamino)-heptan-1-ol

3-Cyclopentyl-2-(6-methyl-5-nitro-pyridin-2-ylamino)-propan-1-ol

2-(6-Methyl-5-nitro-pyridin-2-ylsulfanyl)-ethanol

[1-(4-Fluoro-3-methyl-phenylamino)-cyclopentyl]-methanol

1-[4-.(2-Hydroxy-1,1-dimethyl-ethylamino)-2-trifluoromethyl-phenyl]-ethanone

1-[4-((S)-1-Hydroxymethyl-3-methyl-butylamino)-2-trifluoromethyl-phenyl]-ethanone

- 1-[4-(1-Hydroxymethyl-cyclopentylamino)-2-trifluoromethyl-phenyl]-ethanone
- [1-(4-Methanesulfonyl-3-methyl-phenylamino)-cyclopentyl]-methanol
- 2,2-Dimethyl-3-(6-methyl-5-nitro-pyridin-2-ylamino)-propan-1-ol
- 2, 2-Dimethyl-3-(3-methyl-4-nitro-phenylamino)-propan-1-ol
- 4-(R)-1-Benzylsulfanylmethyl-2-hydroxy-ethylamino)-2-trifluoromethyl-benzonitrile
- (R) -2-(5-Methyl-5-nitro-pyridin-2-ylamino) -3-phenylmethanesulfinyl-propan-1-ol
- 4-(R)-2-Bydroxy-1-phenylmethanesulfinylmethyl-ethylamino)-2-trifluoromethyl-benzon itrile
- (1-(4-Nitro-phenylamino)-cyclopentyl)-methanol
- (S)-2-(4-Nitro-phenylamino)-pentan-1-ol
- (S)-4-Methyl-2-(4-nitro-phenylamino)-pentan-1-ol
- [1-(2-Bromo-4-nitro-phenylamino)-cyclopentyl]-methanol
- (S)-2-(2-Bromo-4-nitro-phenylamino)-pentan-1-ol
- (S) -2- (2-Bromo-4-nitro-phenylamino) -4-methyl-pentan-1-ol or a pharmaceutically acceptable salt thereof.
- 13. Use of compound according to claim 1, wherein R_1 or R_2 is a C_6 - C_{10} arythic comprising an aryl-substituted sulfur-containing C_1 - C_{10} alkyl group.
- 14. Use of a compound according to claim 1, wherein in R₁ or R₂ the alkylsulfur is substituted with a C₆ aryl group.
- 15. A pharmaceutical composition containing a compound as defined in Formula I of any preceding claim.

- 16. Use according to claim 1 wherein the disease is caused by an increase in androgen receptor activity.
- 17. Use according to any of claims 1-14 or 16 wherein the disease is chosen from the group consisting of, prostate cancer, lipid abnormalities, cardiovascular disease and psychological abnormalities, male pattern baldness (alopecia), benign prostatic hyperplasia (BPH) and acne, hirsutism, amenorma, hypogonadism, anemia, diabetes, defects in spermatogenesis, cachexia, osteoporosis, osteopenia, and muscle wasting.

18. A compound as defined by Formula I:

$$R_{6} \xrightarrow{\overset{\overset{}}{\underset{}}{\underset{}}\overset{\overset{}}{\underset{}}\overset{\overset{}}{\underset{}}\overset{\overset{}}{\underset{}}\overset{\overset{}}{\underset{}}\overset{\overset{}}{\underset{}}{\underset{}}\overset{\overset{}}{\underset{}}\overset{\overset{}}{\underset{}}{\underset{}}\overset{\overset{}}{\underset{}}{\underset{}}\overset{\overset{}}{\underset{}}{\underset{}}{\underset{}}\overset{\overset{}}{\underset{}}{\underset{}}{\underset{}}\overset{\overset{}}{\underset{}}{\underset{}}\overset{\overset{}}{\underset{}}{\underset{}}\overset{\overset{}}{\underset{}}{\underset{}}\overset{\overset{}}{\underset{}{\underset{}}{\underset{}}{\underset{}}{\underset{}}{\underset{}}{\underset{}}{\underset{}}{\underset{}}{\underset{}}{\underset{}}{\underset{}}{\underset{}}{\underset{}{\underset{}}{\underset{}}{\underset{}}{\underset{}}{\underset{}}{\underset{}}{\underset{}}{\underset{}}{\underset{}}{\underset{}}{\underset{}}{\underset{}}{\underset{}{\underset{}}{\underset{}}{\underset{}}{\underset{}}{\underset{}}{\underset{}}{\underset{}}{\underset{}}{\underset{}}{\underset{}}{\underset{}}{\underset{}}{\underset{}{\underset{}}{\underset{}}{\underset{}}{\underset{}}{\underset{}}{\underset{}}{\underset{}}{\underset{}}{\underset{}}{\underset{}}{\underset{}}{\underset{}}{\underset{}{\underset{}{\underset{}}{\underset{}}{\underset{}}{\underset{}}{\underset{}}{\underset{}}{\underset{}}{\underset{}}{\underset{}}{\underset{}}{\underset{}}{\underset{}}{\underset{}{\underset{}}{\underset{}}{\underset{}}{\underset{}}{\underset{}}{\underset{}}{\underset{}}{\underset{}}{\underset{}}{\underset{}}{\underset{}}{\underset{}}{\underset{}{$$

Formula I

in which;

R₁ and R₂ are the same or different and independently selected from the group consisting of; hydrogen, halogen, C₁-C₁₀ alkyl, C₁-C₁₀ substituted alkyl, C₂-C₁₀ alkenyl, C₂-C₁₀ alkynyl, C₁-C₁₀ alkoxy, C₁-C₁₀ alkynoxy, C₁-C₁₀ alkylthio, C₁-C₁₀ alkenylthio, C₁-C₁₀ alkynylthio, C₁-C₁₀ alkylsulphone, C₁-C₁₀ alkenylsulphone, C₁-C₁₀ alkynylsulphone, C₂-C₁₀ arylsulphone, C₁-C₁₀ alkylsulphoxide, C₁-C₁₀ alkenylsulphoxide, C₁-C₁₀ alkynylsulphoxide, C₂-C₁₀ arylsulphoxide, C₁-C₁₀ alkylarylthio, C₁-C₁₀ alkylarylsulphoxide, C₁-C₁₀ alkylarylsulphoxide, C₂-C₁₀ aryl, or C₃-C₂₀ heteroaryl, optionally substituted with 0, 1, 2 or 3 groups of R^a which groups may be the same or different; or R₁ and R₂ may together form a C₃-C₁₀ cycloalkyl group;

R₃ and R₄ are the same or different and independently selected from hydrogen, halogen, C₁-C₂₀ alkyl, C₃-C₇ cycloalkyl, C₂-C₄ alkenyl, C₂-C₄ alkynyl, C₁-C₄ alkoxy, C₁-C₄ alkynoxy, C₁-C₄ alkynoxy, C₁-C₄ alkylthio, C₁-C₄ alkynylthio, C₁-C₄ alkynylthio C₁-C₁₀ alkylsulphone, C₁-C₁₀ alkenylsulphone, C₁-C₁₀ alkynylsulphone, C₆-C₁₀ arylsulphoxide, C₁-C₁₀ alkylsulphoxide, C₁-C₁₀ alkylsulphoxide, C₆-C₁₀ alkylarylsulphone, C₁-C₁₀ alkylarylthio, C₁-C₁₀ alkylarylsulphone, C₁-C₁₀

alkylarylsulphoxide, C₆-C₁₅ aryl, C₅-C₂₀heteroaryl optionally substituted with 0, 1, 2 or 3 groups of R³ which groups may be the same or different; or can together form a keto group;

R₅ is chosen from the group consisting of; nitro, cyano, -CH₂CN, -COMe, acetic acid, halogen, sulphonic acid, -SO₂CH₃, aldehyde, carboxylic acid or ester, phosphonic acid or ester;

R₆ is chosen from the group consisting of; hydrogen, C₁-C₅ alkyl, halogen, CN, CO₂H, CHF₂, CH₂F or CF₃;

R₇ is chosen from the group consisting of; H, halogen or C₁-C₅ alkyl;

R₈ is chosen from the group consisting of; hydrogen, C₁-C₅ alkyl, halogen, CHF₂, CH₂F or CF₃;

X is chosen from the group consisting of; -NH-, -O-, -S-, -SO-, -SO₂, -Se-, -Te- or --S-S-

Y is chosen from the group consisting of; hydrogen, hydroxy, -CH2OH, methoxy, NH₂, unbranched, branched or cyclic C₁-C₅ alkyl, unbranched, branched or cyclic -NH(C₁-C 8); unbranched, branched or cyclic N(C₁-C₈)₂, -NH(C₆aryl), -N(C₆aryl)₂, -NH(C₁-C₁₀ heteroaryl), and -N(C₅-C 10 heteroaryl)₂, C₅-C 10 heteroaryl wherein any of said aryl or heteroaryl groups are optionally substituted with up to 3 groups of R² which groups may be the same or different;

Z is chosen from the group consisting of; C, N, or O;

R* represents a member selected from: hydrogen, halogen, -CN, OH, CO₂H, CHO, NO₂, -NH₂, -NH(C₁.C₄); N(C₁.C₄)₂, -NH(C₆ aryl), -N(C₆ aryl)₂, -NH(C₅.C₁₀ heteroaryl), and -N(C₅.C₁₀ heteroaryl)₂; or a pharmaceutically acceptable salt thereof.

with the proviso that the compound is not:

$$O_2N$$

- 19. A compound according to claim 18, wherein R₁ or/and R₂ are H, (S)-methyl, methyl, (R)-ethyl, (S)-ethyl, ethyl, (R)-propyl, (S)-propyl, propyl, (S)-butyl, (S)-1-methyl-propyl, (S)-2-methyl-propyl, (R)-isopropyl, (S)-isopropyl, isopropyl, cyclopentyl, -(CH₂)₂SMe, (R)-CH₂SCH₂Ph, (S)-benzyl, 4-chloro-benzyl, (S)-3-methyl-1-H-indole or (S)-phenyl;
- 20. A compound according to either of claims 18 and 19, wherein R₃ is chosen from the group consisting of; hydrogen, methyl, ethyl, phenyl, 3-hydroxy phenyl, 4-hydroxy phenyl, or forms a keto group together with R₄.
- 21. A compound according to any of claims 18-20, wherein R_4 is H, methyl, or forms a keto group together with R_3 .
- 22. A compound according to any of claim 18-21, wherein R_{5} is NO₂, CN, CH₂CN or CO₂H;
- 23. A compound according to any of claims 18-22, wherein R₆ is Me, or CF₃.
- 24. A compound according to any of claims 18-23, wherein R₇ is H or Me.
- 25. A compound according to any of claims 18-24, wherein R₈ is H or methyl.
- 26. A compound according to any of claims 18-25, wherein X is NH.
- 27. A compound according to any of claims 18-26, wherein Y is H, -OH, -OMe, -N (CH₂CH₃)₂, piperidime, or 4-nitro-2-ylamino.
- 28. A compound according to any of claims 18-27, wherein Z is CR7 or N.
- 29. A compound according to any of claims 18-28, wherein the compound is chosen from the group consisting of:

2-Methyl-2-(4-nitro-3-trifluocomethyl-phenylamino)-propan-1-ot,

[1-(4-Nitro-3-trifluxometryl-phenylamino)-cyclopentyl]-methanol;

(S)-2-(4-Nitro-3-triflumomethyl-phenylamino)-3-phenyl-propan-1-ot;

(S)-2-(4-Nitro-3-trifluoromethyl-phenylamino)-butan-1-ol;

2-Methyl-2-(3-hydroxy-4-nitro-phenylamino)-propan-1-ol;

[1-(3-Methyl-4-nitro-phenylamino)-cyclopentyl]-methanol;

(S)-2-(3-Methyl-4-nitro-phenylamino)-butan-1-ol;

2-Methyl-2-(6-methyl-5-nitro-pyridine-2-ylamino)-propan-1-ol;

[1-(6-Methyl-5-nitro-pyridine-2-ylamino)-cyclopentyl]-methanol;

(S)-2-(6-Methyl-5-nitro-pyridin-2ylamino) 2-phenyl-ethanol;

(S) -2-(6-Methyl-5-nitro-pyridine-2-ylamino)-3-phenyl-propan-1-ol;

(S)-2-(6-Methyl-5-nitro-pyridin-2-ylamino)-butan-1-ok

(DL) -3-(4-Chloro-phenyl)-2-(6-methyl-5-nitro-pyridin-2-ylamino)- -propan-1-ol;

(S)-2-(6-Methyl-5-nitro-2-pyridin-2-ylamino)-propionic acid;

(S)-2-(6-Methyl-5-nitro-pyridin-2-ylamino)-propan-1-ol;

2-(2,3-Dimethyl-4-nitro-phenylamino)-2-mehtyl-propan-1-ol;

(S)-2-(3,5-Dimethyl-4-nitro-phenylamino)-butan-1-ol;

4-(2-Hydroxy-1,1-dimethyl-ethylamino)-2-trifluoromethyl-benzonitrile;

4-(1-Hydroxymethyl-cyclopentylamino)-2-trifluoromethyl-benzonitrile;

(S)-4-(1-Hydroxymethyl-cyclopentylamino)-2-trifluoromethyl-benzonitrile;

(R)-4-(1-Hydroxymethyl-butylamino)-2-trifluoromethyl-benzonitrile;

(S)-4-(1-Hydroxymethyl-butylamino)-2-trifluoromethyl-benzonitrile;

[4-((S)-1-Hydroxymethyl-butylamino)-2-trifluoromethyl-phenyl]-acetonitrile;

[4-((R)-1-Hydroxymethyl-butylamino)-2-trifluoromethyl-phenyl]-acetonitrile;

[4-((S)-1-Hydroxymethyl-3-methyl-butylamino)-2-trifluoromethyl-phenyl]-acetonitrile;

4-(2-Hydroxy-1,1-dimethyl-ethylamino)-2-methyl-benzonitrile;

6-(2-Hydroxy-1,1-dimethyl-ethylamino)-2-methyl-nicotinonitrile;

4-(2-Hydroxy-1,1-dimethyl-ethylamino)-2,3-dimethyl-benzonitrile;

and compounds having the formula:

in which $R_{9},\,R_{6}$ and Z are as defined in the following table:

R9	R6	Z
н Х ^и / он	CF ₃	СН
HO KIN X	CF₃	СН
≯ _N → OH	CF ₃	СН
HO XNH	CF ₃	СН
HO	CF ₃	СН
но	CF ₃	СН
HN HO	CF ₃	CH
HO OH	CF ₃	СН
	L	L

R9	R6	Z	
₹ ^N OH	CF ₃	СН	
HO I	CF ₃	СН	
S OH	CF ₃	СН	
NH OH	CF ₃	СН	
S NH CR	CF ₃	СН	
× NH OH	CF ₃	СН	
HO HO	CF ₃	СН	
HO HO	CF ₃	СН	
N H	CF ₃	СН	

R9	R6	Z
¥ ^H ~~_o~	CF ₃	СН
XNH	CF ₃	СН
\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	CF ₃	СН
×NH	CF ₃	СН
O NH NH	CF ₃	СН
HO N X	CF ₃	СН
H None OH	СН3	N
но Д	CH ₃	N
X, OH	CH ₃	N

R9	R6	Z
но	СЊ	N
но	СЊ	N
HO HN X	СЊ	N
HO	СЊ	N
₹ ^N → OH	СН	N
→ NH OH	СН	N
HO HN	СН	N
¥,NH OH	СЊ	N
S OH	СЊ	N

R9	R6	Z
V OH NH	СН3	N
S NH OH	СН₃	N
X _{NH} OH	СН3	N
OH H	СН₃	N
HO	СНз	N
×1~~~	СН₃	N
×MH	СНз	N
₹ ^{NH}	СН₃	N
HONNE	СН₃	N
^H → OH	СН₃	СН

	26		 -1	
R9	R6	Z	+	
HO JANNA MANA	СН₃	СН		
Х <mark>и</mark> ✓ он	СНз	СН		
но	СН₃	сн		
HO YNH	СНз	СН		
HO	СН₃	СН		
HN HO	СН₃	СН		
>ZNH OH	- CH ₂	СН		
S OH	СН₃	сн		
→ OH	СН	СН		
→ NH OH	CH ₃	СН		
HOWA	СНз	СН		
			-	
	 	 	-	
				
	 	+	 	
	1	-	1	
			1	

R9	R6	Z		
~~*×	СН3	СН		
	СН3	СН		

4-(2-Hydroxy-1,1-dimethyl-ethylamino)-2-methyl-benzoic acid;

(6-Methyl-5-nitro-2-pyridin-2-ylamino)-butionic methyl ester,

2-Methyl-N-(6-methyl-5-nitro-pyridin-2-yl amino)-propan-2-ol;

4-((R)-2-Hydroxy-1-methyl-ethylamino)-2-trifluoromethyl-benzonitrile

4-((R)-1-Furan-2-ylmethyl-2-hydroxy-ethylamino)-2-trifluoromethyl-benzonitrile

(R)-3-Furan-2-yl-2-(6-methyl-5-nitro-pyridin-2-ylamino)-propan-1-ol

2-(6-Methyl-5-nitro-pyridin-2-ylamino)-heptan-1-ol

3-Cyclopentyl-2-(6-methyl-5-nitro-pyridin-2-ylamino)-propan-1-ol

2-(6-Methyl-5-nitro-pyridin-2-ylsulfanyl)-ethanol

[1-(4-Fluoro-3-methyl-phenylamino)-cyclopentyl]-methanol

1-[4-(2-Hydroxy-1,1-dimethyl-ethylamino)-2-trifluoromethyl-phenyl]-ethanone

1-[4-((S)-1-Hydroxymethy1-3-methyl-butylamino)-2-trifluoromethyl-phenyl]-ethanone

1 1

- 1-[4-(1-Hydroxymethyl-cyclopentylamino)-2-trifluoromethyl-phenyl]-ethanone
 - [1-(4-Methanesulfonyl-3-methyl-phenylamino)-cyclopentyl]-methanol
- 2,2-Dimethyl-3-(6-methyl-5-nitro-pyridin-2-ylamino)-propan-1-ol
- 2, 2-Dimethyl-3-(3-methyl-4-nitro-phenylamino)-propan-1-ol
- 4-((R)-1-Benzylsulfanylmethyl-2-hydroxy-ethylamino)-2-trifluoromethyl-benzonitrile
- (R) -2-(6-Methyl-5-nitro-pyridin-2-ylamino) -3-phenylmethanesulfinyl-propan-1-ol
- $\hbox{$4-(R)-2-Hydroxy-1-phenylmethane sulfiny lmethyl-ethylamino)-2-trifluoromethyl-benzon itrile \\$
- [1-(4-Nitro-phenylamino)-cyclopentyl]-methanol
- (S)-2-(4-Nitro-phenylamino)-pentan-1-ol
- (S)-4-Methyl-2-(4-nitro-phenylamino)-pentan-1-ol
- [1-(2-Bromo-4-nitro-phenylamino)-cyclopentyl]-methanol
- (S)-2-(2-Bromo-4-nitro-phenylamino)-pentan-1-ol
- (S)-2-(2-Bromo-4-nitro-phenylamino)-4-methyl-pentan-1-ol
- 30. A compound according to any of claims 18-29, wherein R_1 or R_2 is a C_6 - C_{10} arythic comprising an aryl-substituted sulfur-containing C_1 - C_{10} alkyl group.
- 31. A compound according to any of claims 18-30, wherein in R_1 or R_2 the alkylsulfur is substituted with a C_6 aryl group.